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THE MEDICAL INSPECTION OF ELEMENTARY SCHOOL CHILDREN.

THE ROYAL SOCIETY OF MEDICINE.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

Friday, February the 26th, 1909.

Dr. GEORGE CARPENTER (Vice-President of the Royal Society of Medicine and Chairman of Council of the Section for the Study of Disease in Children) opened the discussion with the following paper :

THE subject of the medical inspection of elementary school children has been before the Council of the Society for the Study of Disease in Children and the Section for the Study of Disease in Children of the Royal Society of Medicine on several occasions. The Council consider that the time has arrived when a discussion on this important subject by the only scientific body which devotes its energies exclusively to the study of children's diseases in the United Kingdom will be of medical and public service, and they have requested me, having had some experience of medical inspection of elementary school children, to open it.

In accordance with their request, I have pleasure in bringing the following points before your notice.

The Board of Education in its circular numbered 582, dated January the 23rd, 1908, addressed to local education authorities on the subject of medical inspection of school children, while admitting that it has been pressed by many local education authorities to issue a complete set of forms for use, nevertheless thinks it "expedient to leave considerable latitude in regard to the particular forms or schedules, subject to certain considerations."

Accompanying this circular is a schedule of medical inspection wherein the Board of Education indicate the particulars, attention to which they regard as constituting "the *minimum* of efficient medical inspection," and "they consider that at least these particulars should be included in any other schedule which the local education authority may authorise for use in their schools."

Further, the Board of Education states that "it deliberately excludes many points of anthropometrical or statistical interest which are worthy of attention, and which it is hoped may receive attention in suitable districts."

Clearly then, local education authorities were invited to prepare their own schedules for use in their schools, the only stipulation being, to use the Board of Education's own terms, "at least these particulars should be included" which it set out as the *minimum*.

The Board of Education was obviously not averse to receiving additional useful medical information, because it states in its circular that "it hopes points of anthropometrical or statistical interest may receive attention in suitable districts," as well as from the fact that it lays *special* stress upon the schedule which it sets forth as constituting the *minimum* of efficient medical inspection.

While the Board of Education is not at the present time, so it states, prepared to issue forms, nevertheless any forms which experience of the working of the Act may show to be necessary or desirable will be issued in due course. The intention seems clear. Others are to pick the chestnuts out of the fire and the Board of Education will consume them. The odium, should any be attached to this pioneer work, is to fall upon local education authorities—in other words, the local medical inspectors of the schools, because it is obvious who would perform the *rôle* of Jonah should a storm arise. The Board of Education, in face of difficulties, would trim its sails to the popular hurricane and help the others lighten the ship.

And it is well realised that there would be difficulties, because these are specially mentioned in the circular. Some of the

difficulties are of no medical concern—thus the Board draws attention to "the limited resources of local education authorities," and "the introduction of a new element into school life or organisation." But the "feelings or prejudices of parents have to be considered," so the Board states, and it is precisely those feelings and prejudices which hamper the medical man in his duties, which mark him out for popular sacrifice, and in the escape from which he looks for, and is entitled to expect, official sanctuary.

Turning to the schedule of medical inspection, it is obvious to the experienced physician that as there set forth it is unpractical and impracticable. To make it workable in my own experience a practical clinical chart had to be designed.

It will be seen on inspection of the Board's circular that attached to each of the headings comprised in this medical inventory are reference numbers, and on referring to these under the heading of "Notes for Inspecting Officer" the nature of the medical information that is demanded by the Board of Education as the *minimum* of efficient medical inspection is there set forth.

For example, on referring to the reference number attached to the words "Heart and Circulation" on the Schedule of Medical Inspection (*vide* page 158) this is indicated as meant to "include heart-sounds, position of apex-beat, anæmia, etc., in case of anything abnormal or requiring modification of school conditions or exercise."

To that attached to "Lungs" the reference number specifies "including physical and clinical signs and symptoms." To that under "Nose and Throat" the specification is "The presence or absence of obstruction in the naso-pharynx is the chief point to note. Observations should include mouth-breathing, inflammation, enlargement, or suppuration of tonsils, probable or obvious presence of adenoids, polypi, specific or other nasal discharge, catarrh, malformation (palate), etc."

To that attached to "Tuberculosis" the reference number specifies "glandular, osseous, pulmonary or other forms."

Indicating the extreme precision that was required under "Rickets" the reference number orders the medical inspector to "state particular form, especially in younger children." I personally am acquainted with and admit only one variety of rickets, but doubtless the Board of Education will instruct its medical inspectors as to the precise meaning of this instruction when it issues in due course "any forms which experience in the working of the Act may show to be necessary or desirable."

But I will not weary you by taking you through any more of these items, I have sufficiently indicated the Board of Education's train of medical thought in regard to these matters, and as the schedule is before you you will have observed the various items for yourselves.

There are no less then twenty-four different headings comprised in this official schedule of medical inspection dealing with, among other things, the skin, the teeth, the nose and throat, the eye, the ear, the nervous system, and so on.

The twenty-fourth item on the list comprises "other disease or defect," and on referring to the reference number this is stated to mean "any weakness, defect, or disease not included above (*e. g.* ruptures) specially unfitting the child for ordinary school life or physical drill, or requiring either exemption from special branches of instruction or particular supervision."

It will be seen, therefore, that this *minimum* of medical inspection according to the Board of Education's memorandum, which specifically mentions congenital syphilis, Hutchinsonian teeth, and states that "other skin diseases should be looked for" together with "particulars of diseased conditions actually present or signs of incipient disease," "spinal curvature," "bone disease," "deformed chest," "shortened limbs," and a schedule moreover which is prodigal in "etceteras," implies and necessitates not only a thorough medical examination but a very skilful and experienced medical examiner.

To facilitate medical inspection in a London suburb, whose local education authority had engaged me to examine some hundreds of their school children, I drew up a practical form which comprised all the requirements contained in the Board of Education's circular (No. 582) to local education authorities.

That form is now before you, and on comparing it with the medical requirements as set forth by the Board of Education you will observe that it enables the medical examiner to quickly register the defects which the Board of Education deliberately instructs him to discover and which he may find upon the child.

The form, though at first sight it may appear to be complicated, is in reality very simple, and has been devised for the rapid recording of the results of the medical inspection by a few pen marks in red ink—the addition of a simple word such as "yes" placed opposite the corresponding condition, or an abbreviation such as "n" for normal, or the crossing out by the pen other printed conditions which are not present and leaving intact those that are present are sufficient for the majority of the notes that are required.

I will now pass to the practical working of the Act in so far as it has come under my personal observation.

The medical inspection dealt with those small children who had first joined school and those children who were about to leave school. It took place at the termination of the year 1908, and I was assisted by Dr. Kenneth Kellie, Mrs. Stevens, M.B., B.S.Lond., a ward sister from the Queen's Hospital for Children, a private nurse, and the lady health visitor.

The children were examined under the conditions which usually obtain at the London children's hospitals, and such as I have been accustomed to make during the twenty odd years that I have been attached as a physician to those institutions.

The little ones were undressed, wrapped in a blanket, placed on a couch, and a thorough medical inspection was made in a well appointed room, the best that could be obtained at the particular school for the purpose. In many instances the parents were present and in all cases one of the school-masters or mistresses.

As the Board of Education rightly anticipated the feelings and prejudices of parents had to be reckoned with. I will read one letter of complaint that I have received from a parent, who also made direct complaint to a local paper and the Board of Education:

"28th November, 1908.

"With reference to the medical examination of my little boy at the Church Fields School on the 26th, I regret to inform you that the child has continually complained of his throat since the doctor took the liberty of pushing his finger and some instrument down his throat and my wife has had to take him to her doctor. Had my wife known such treatment was to be undergone she certainly would not have allowed him to go; unfortunately I was away. I think it only right to inform you of this, in case he may develop some other complaint, as the children were examined so quickly that I have certain reasons for wondering whether clean hands and instruments were used for each child. I here wish to inform you that I shall not allow either of my other children to be examined in this ridiculous and unnecessary fashion."

This parent's letter to the local paper was in much the same strain, and in a postscript to that he states: "I omitted to mention a most disgusting thing done, *i. e.* the rug or blanket used to cover the child while being conducted nude from the undressing room to the examiner and back is the same article used for each and every child. Supposing any of the children are suffering from a skin disease, who will be held responsible?"

In his communication to the Board of Education he asks if children must be stripped absolutely nude, instruments and fingers forced down their throats, "if so he strongly objects, as he thinks the treatment disgusting in the extreme."

In reply to a letter from the Clerk of the local education authority in reference to parents' complaints, the Board of Education wrote to the local education authority as follows, dated December the 9th, 1908:

"Sir,—In reply to Mr. —— letter of the 7th instant, I am directed to state that a consideration of the inspection form used by Dr. Carpenter and of the objections received from parents raises questions of great practical importance which appear to require the immediate attention of the local education authority.

"These questions can be more conveniently discussed at a personal interview than by correspondence, and I am to suggest that an appointment should be made at an early date for representatives of the local education authority to attend at this office and discuss the matter with the Board's chief medical officer."

In response to that the Chairman and Clerk of the local education authority attended at the offices of the Board of Education and had an interview with the Chief Medical Officer. The Clerk notified me of this on the morning of the interview, my attendance there not being specifically asked for. I took it to mean that I was not wanted, but in any case I could not have attended as the notice was too short.

On December the 31st I received a letter from the Clerk of the local education authority as follows:

"Herewith copy correspondence with the Board of Education respecting the medical examination of school children, particularly in reference to a complaint by a Mr. W—, together with a copy of W—'s letter to the Board. I shall be glad to hear for the information of the Committee what you have to say with reference to W—'s several allegations.

"When, with my Chairman, I saw the Medical Officer of the Board, I gave him a copy of your form and suggested that he should strike out what he considered inadvisable or unnecessary, but they do not appear inclined to deal with it in this way.

"I am writing them again."

The gist of that interview, which I subsequently gathered from the Clerk of the local education authority, was that undressing children for the purpose of medical inspection was superfluous and unnecessary, and that the heart could be easily auscultated by lift-

ing up the underclothing and exposing a small cutaneous area over the left nipple.

The medical examination of school children in this district was completed on December the 16th last at the close of the school year.

On January the 13th I had an informal discussion with the Clerk of the local education authority on the subject of school inspection, and I suggested to him that, in deference to "Mrs. Grundy," all reference to the male genital organs and urine could be left out of my form.

On January the 15th I received the following communication from the Clerk of the local education authority:

"The subject of medical examination was before the Elementary Schools Committee on Wednesday last. I duly conveyed to them, as promised, your strong opinion that the form compiled by you merely carried out the directions of the Board's circular No. 582. I also explained to them that in deference to the Board's directions you propose to modify the form in the manner shown on the copy I submitted to them.

"I cannot say that the Committee were satisfied; many of them held very strong views upon the items in the form which have been acted upon but which you now agree to delete. Finally the form was referred to two members of the Committee with instructions to modify it in accordance with the Committee's views. Their report will come up to the Education Committee which sits on Monday next, at 6 p.m."

My form, as you will observe, was referred to two members of the local education committee to *modify it in accordance with the Committee's views!*

One of these committeemen was a local medical practitioner. My bowdlerized form, which I was not invited to see, was sent to the Board of Education and met with the following reception:

"10th February, 1909.

"In reply to Mr. S—'s letter of the 22nd ultimo, I am directed to state that the Board cannot undertake to suggest the omission of particular items from the amended copy of the schedule therein submitted. Even with the omissions suggested by the authority that schedule is still open in a very considerable measure to the criticisms offered by the Board in their letter of the 11th ultimo.*

"In circular 582 a clear indication has been given of the nature and scope of the medical inspection which the Board consider to be suitable in the case of children attending public elementary schools;

* *Vide* letter dated December the 9th, 1908.

and they are still of the opinion that the entire question of the schedule should be reconsidered by the authority, with a view to the adoption either of the Board's schedule or of some one of the several other schedules in common use, with, if necessary, such reasonable modifications as may be indicated by any special local conditions or circumstances."

The *coup de grâce*, however, was administered by the local education authority, who tossed the printer's bill for the form into the Public Health Office with the intimation that the Medical Officer of Health was expected to discharge it.

It is obvious, therefore, that if the medical inspector does his duty and examines properly, *if the parents object* he need expect neither support nor encouragement from his Local Education Authority nor from the Board of Education. If, on the other hand, he does not perform his duties properly his functions are parasitic rather than medical, and he becomes an extra and an unnecessary burden on the rates and the taxpayer.

Turning once more to the circular 582 of the Board of Education, the following extraordinary pronouncements are made in reference to the purely medical aspect of this question. "The child need only," so the Board lays down, "have its clothes loosened or be partially undressed," and "needless examination of healthy children should for obvious reasons be avoided."

But what medical man is there who understands his profession and who knows his business who can pronounce by *looking at a child* whether it is healthy or not ? The test of health is afforded by the expert medical examination.

Fancy in these days of advanced medical knowledge being instructed by the Board of Education that a medical inspection of a child can be properly conducted by loosening its clothes or by partially undressing it.

When I was a medical student such methods were then looked upon as very old fashioned and behind the times, and since then very many moons have come and gone.

If these be really the well-considered views of the Board of Education, then the sooner it is properly instructed by men who have had clinical experience and who are authorities on the diseases of children the better will it be for the country. If we are to have medical inspection of elementary school children let it be a medical inspection in the proper sense and acceptation of the term and not a sham.

I have had nearly a quarter of a century's work among children,

and my views in regard to the way a medical inspection or examination—call it what you please—should be conducted are exactly the opposite to that of the Board of Education.

I frankly tell the Board the information it demands in its circular No. 582 cannot be obtained by its antiquated instructions.

And my long experience among sick children is entirely borne out by my examination of 552 presumably healthy children of a London suburb who *were* undressed and *were* properly examined.

Here are a few selections among very many items of interest:

Of the 552 examined there were 249 boys and 210 girls between the ages of three and seven years, a total of 459 small children. The remainder boys and girls varied between the ages of ten and fifteen years. In 69 girls 32 had decided holes, and 31 small holes in the abdominal wall underneath the umbilical cicatrix, and 3 had protuberant navels. In 258 boys 51 had decided holes and 38 small holes in the same situation, and in 7 the navel was protuberant.

Two children had inguinal hernia. Eight external abdominal rings in males admitted the index finger and 71 admitted the little finger, so that many at least of these children were in a fair way to develop inguinal hernia later on. Twenty-five children required circumcision. Weak ankles and flat feet were quite common, and no less than 234 children displayed these features in more or less degree.

Over 200 displayed rickety deformities in varying degrees and no less than 270 had beaded ribs; in a few rickets were pronounced. In 101 children the abdomen was protuberant and in 7 the abdominal glands were palpable. In 367 children the teeth were carious; with a total of 1514 carious teeth an average of 4 per girl and 4½ per boy. The tonsils were enlarged in 119 and in 129 there were adenoids, the naso-pharynx in 34 being completely blocked by growth. Twenty-one were deaf from Eustachian catarrh and in 9 children there was otorrhœa with perforated drums. In 181 children the deep cervical glands were enlarged, in 172 the submaxillary, and in 337 the superficial cervical, and in 252 the inguinal glands were palpable.

Twenty-nine children had bronchitis, 1 pneumonia, and 1 cirrhosis of one lung with a transposed heart, a skiagram of which I produce for your inspection. This last child looked particularly well and had rosy cheeks, and under the quaint instructions of the Board of Education would have been excluded from any searching examination. Of skin complaints 2 had xerodermia, 1 psoriasis, and 7 pediculi corporis. These defects were discovered by examining their skins, and not by looking at their waistcoats and pinafores. In 39 there

were no vaccination marks. But I must be careful here, lest the conscientious objectors take exception to my observations.

To me, engaged in examining sick children all my medical career, the medical inspection of a number of so-called healthy children proved an irresistible attraction, and I accepted the offer of the local education authority to make the initial medical examinations with pleasure, but the personal experiences that I have gained have not been such as would lead me to a desire to repeat them.

To many medical inspectors of school children, however, who take an interest and a pride in their work, the class of men the Board of Education should strive to enlist in its service, and who hope to make a living by it, what they can and what they cannot do, and how much support they will receive in their arduous duties from the people who have set them their task, are matters of vital interest.

Faced by discontented and fault-finding parents of the lower classes on the one hand, by unsympathetic and technically uninformed local education authorities, often inspired by local medical jealousies on the other, and left in the lurch by a timid Board of Education, their lot is not likely to be an enviable one.

They are faced by expulsion and ignominious treatment if they do their duty and properly examine the children, as they are bound to do if they carefully follow the Board of Education's "Notes for Inspecting Officer," and if they do not do their duty their work will be of trifling value to the elementary school children and the State. It requires no prophet to foresee what will happen if medical inspectors are faced by parental objections, and are deprived of official support: they will pass along the lines of least resistance, the *res angusta domi* will prevail, and the national physique will continue to suffer. The Board of Education, if it intends to stand by its "Notes for Inspecting Officer," must be straightforward and not shelter itself behind inspecting officers, and allow the men in its service to be led out to execution because they have performed their duties conscientiously and well. If, on the other hand, the Board of Education's "Notes for Inspecting Officer," the *minimum* of efficient medical inspection as laid down by the Board, are not intended to be taken seriously, then let it modify or withdraw them, because, as they stand, they compel a conscientious medical inspector to make a thorough examination in every case.

This section of the Royal Society of Medicine, consisting as it does of leading children's specialists in the Kingdom, has hitherto abstained from expressing an opinion on the medical aspects of the medical inspection of elementary school children.

They now have the opportunity to instruct the country and a Board of Education as to the way a medical examination of the child should be conducted in their experience. Further, the Board of Education is in need of expert instruction as to the unwisdom of being satisfied as to the health of a child by a casual inspection of a triangle of exposed flesh over the cardiac area, or by means of a glance at the child through its wearing apparel, however learned that glance may be.

The hands of the Chief Medical Officer of the Board of Education evidently require strengthening, because it must be as apparent to him as it is known to me that medical inspection without medical examination is a most misleading procedure.

Let the Board of Education adopt a manly course and take the responsibility of medical inspection on its own shoulders instead of using medical inspectors as whipping boys.

Let it take its courage in both hands and at once issue a practical form and compel a proper medical examination of the children, such as a sick child would undergo at any recognised London or provincial children's hospital, and let it be well understood by local education authorities and others that it will support the medical inspectors in regard to this.

The Act (Education [Administrative Provisions] Act, 1907) lays down in Section 13: (1) "The powers and duties of a Local Education Authority under Part III of the Education Act, 1902, shall include (*b*) the duty to provide for the medical inspection of children immediately before, or at the time of, or as soon as possible after their admission to a public elementary school, and on such other occasions as the Board of Education direct, and the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools."

It is clear, then, that the Legislature intended medical examination when it ordered medical inspection, for it at the same time authorised attention to the health and physical condition of the children. Before there can be treatment there must be diagnosis, and diagnosis must be preceded by medical examination.

The present instructions to local education authorities by the Board of Education on the way to conduct a medical examination can only be viewed as an ill-advised, though doubtless unintentional, encouragement to medical inspectors of elementary school children to pocket the fees and neglect the work, and so rob the Act of most of its value.

Circular to Local Education Authorities.

Schedule of Medical Inspection.

Circular 582.

Letters should be addressed—
"The Secretary,
Board of Education,
Whitehall,
London, S.W.,"
and should show the complete postal address and designation of the writer.

BOARD OF EDUCATION,
WHITEHALL, LONDON, S.W.,
23*rd January* 1908.

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907, SECTION 13.

SIR,

1. THE accompanying Schedule has been drawn up in response to requests which the Board of Education have received for further and more definite guidance as regards the details of the work of medical inspection than was given in the Memorandum (Circular 576) which was issued by the Board on 22nd November 1907. The Board have, indeed, been pressed by many Local Education Authorities to issue a complete set of Forms for use in carrying out the work directly or incidentally involved in the performance of these new duties. Any Forms which experience of the working of the Act may show to be necessary or desirable will be issued in due course, but for the present the Board think it expedient to leave considerable latitude, subject to the considerations hereinafter set out, in regard to the particular Forms or Schedules to be used in different cases or circumstances.

2. The chief difficulties to be considered are administrative rather than educational or scientific. There is comparatively little dispute as to the end in view, or as to the means which, from the technical standpoint of medical science and practice, should be adopted for its complete attainment.

But the existing resources of Local Education Authorities are (for practical purposes, at all events) not unlimited, the feelings and prejudices of parents have to be considered, and a new element has to be introduced into school life and organisation with the least possible disturbance and inconvenience. Moreover, in this case two departments of local public administration are brought for the first time into organic connection—those of public health and of public education.

3. The Board are fully aware of these difficulties, and in preparing their Memorandum and Regulations it was necessary for them to consider what system would best reconcile the theoretical and practical considerations, and overcome the divergence between the ultimate end and the end immediately attainable, or between the methods which are scientifically desirable and those which can be applied in existing circumstances at the initiation of the work under the Act.

4. In the accompanying Schedule the Board indicate the particulars, attention to which they regard as constituting the *minimum* of efficient medical inspection, and they consider that at least these particulars should be included in any other Schedule which the Local Education Authority may authorise for use in their Schools. It deliberately excludes many points of anthropometric or statistical interest which are worthy of atten-

tion, and which it is hoped may receive attention in suitable districts. Nor does it profess to lay down the lines of a clinical study or of a scientifically complete medical examination. It is intended to indicate the methods which, in the Board's opinion, should be followed and the particulars which should be attended to for the purpose of determining the fitness of the individual child for school life, to guide the Authority in adapting education to the peculiarities or abnormalities of the child, and to prepare the way for measures for the amelioration of defects in the child or its environment.

A more elaborate and complete form could readily be devised, but the Board's knowledge of the circumstances in which the work is to be done leads them to believe that greater elaboration would in the majority of cases defeat its own end.

5. If this Schedule is properly used, few cases of serious physical weakness or defect will escape detection. Where the ordinary inspection shows the need of further and more searching medical examination a supplementary blank form should be used in which particular defects or diseases should be fully recorded. It may facilitate inspection if the Schedule is printed on cards (8″ by 5″ or 10″ by 6″). The Notes are included in the attached form for the convenience of the School Medical Officer, and should not be reprinted on the cards. Of course it is not necessary that negative findings on all the points mentioned in the Notes should be recorded.

It will be noticed that a space is reserved in the Schedule for "General Observations"; this may conveniently be used to record a general summary of the condition of the child, and any information which may be available as to the home environment, or other conditions affecting its health.

It is considered that the inspection of each child should not occupy on the average more than a few minutes, and that the child need only, as a rule, have its clothes loosened or be partially undressed. Time may be saved in the actual inspection by the Medical Officer if the entries in some of the spaces are filled in by the school authorities before his visit. The four columns in the Schedule are designed for the four inspections required during school life.

With regard to items 17 to 24 of the Schedule, while it is necessary that all indications of diseased or unsound conditions should be thoroughly investigated, needless medical examination of healthy children should, for obvious reasons, be avoided.

6. Where children are found to belong to that class of "defectives" for whose education special provision is or ought to be made under the Statutes relating to such children, such cases should be made the subject of a special report to the Local Education Authority.

7. *All entries of the results of inspection in each individual case must be regarded as confidential.*

I have the honour to be,
Sir,
Your obedient Servant,
(Signed) ROBERT L. MORANT.

To
The Local Education Authority.

Reference Number of Note.

1. Date of birth to be stated exactly, date of month and year.
2. "Other illnesses" should include any other serious disorder which must be taken into account as affecting, directly or indirectly, the health of the child in after life, *e.g.*, rheumatism, tuberculosis, congenital syphilis, small-pox, enteric fever, meningitis, fits, mumps, &c. The effects of these, if still traceable, should be recorded.
3. State if any cases of, or deaths from, phthisis, &c., in family.
4. Note backwardness.
5. Age to be stated in years and months, thus, $5\frac{4}{12}$.
6. Insufficiency, need of repair, and uncleanliness should be recorded (good, average, bad).
7. Without boots, standing erect with feet together, and the weight thrown on heels and not on toes or outside of feet.
8. Without boots, otherwise ordinary indoor clothes.
   Height and weight may be recorded in English measures if preferred. In annual report, however, the final averages should be recorded in both English and metric measures.
9. General nutrition as distinct from muscular development or physique as such. State whether good, normal, below normal, or bad. Under-nourishment is the point to determine. Appearance of skin and hair, expression, and redness or pallor of mucous membrane are among the indications.
10. Cleanliness may be stated generally as clean, somewhat dirty, dirty. It must be judged for head and body separately. The skin of the body should be examined for cleanliness, vermin, &c.; and the hair for scurf, nits, vermin, or sores. At the same time ringworm and other skin diseases should be looked for.
11. General condition and cleanliness of temporary and permanent teeth, and amount of decay. Exceptional features, such as Hutchinsonian teeth, should be noted. Oral sepsis.
12. The presence or absence of obstruction in the naso-pharynx is the chief point to note. Observation should include mouth-breathing; inflammation, enlargement, or suppuration of tonsils; probable or obvious presence of adenoids, polypi; specific or other nasal discharge, catarrh, malformation (palate), &c.
13. Including blepharitis, conjunctivitis, diseases of cornea and lens, muscular defects (squints, nystagmus, twitchings), &c.

Reference Number of Note.

14. To be tested by Snellen's Test Types at 20 feet distance (=6 metres). Result to be recorded in the usual way, *e.g.*, Normal V. $=\frac{6}{6}$. Examination of each eye (R. and L.) should as a rule, be undertaken separately. If the V. be worse than $\frac{6}{9}$, or if there be signs of eye strain or headache, fuller examination should be made subsequently. *Omit vision testing of children under 6 years of age.*
15. Including suppuration, obstruction, &c.
16. If hearing be abnormal or such as interferes with class work, subsequent examination of each ear should be undertaken separately. *Apply tests only in general way in case of children under 6 years of age.*
17. Including defects of articulation, lisping, stammering, &c.
18. Including attention, response, signs of overstrain, &c.
    The general intelligence may be recorded under the following heads:—(*a*) Bright, fair, dull, backward; (*b*) mentally defective; (*c*) imbecile. *Omit testing mental capacity of children under 6 years of age.*
19. Under the following headings should be inserted particulars of diseased conditions actually present or signs of incipient disease. The extent of this part of the inspection will largely depend upon the findings under previous headings.
20. Include heart sounds, position of apex beat, anæmia, &c., in case of anything abnormal or requiring modification of school conditions or exercises.
21. Including physical and clinical signs and symptoms.
22. Including chorea, epilepsy, paralyses and nervous strains and disorders.
23. Glandular, osseous, pulmonary, or other forms.
24. State particular form, especially in younger children.
25. Including defects and deformities of head, trunk, limbs. Spinal curvature, bone disease, deformed chest, shortened limbs, &c.
26. Including any present infectious, parasitical or contagious disease, or any sequelæ existing. At each inspection the occurrence of any such diseases since last inspection should be noted.
27. Any weakness, defect or disease not included above (*e.g.*, ruptures) specially unfitting child for ordinary school life or physical drill, or requiring either exemption from special branches of instruction, or particular supervision.

SCHEDULE OF MEDICAL INSPECTION.

I.—Name _____ Date of Birth [1] _____

Address _____ School _____

II.—Personal History:

(*a*) Previous Illness of Child (before admission).

Measles.	Whooping Cough.	Chickenpox.	Scarlet Fever.	Diphtheria.	Other Illnesses.[2]

(*b*) Family Medical History (if exceptional).[3]

	I.	II.	III.	IV.
1. Date of Inspection				
2. Standard and Regularity of Attendance [4]				
3. Age of Child [5]				
5. Clothing and footgear [6]				
[III.—*General Conditions.*]				
5. Height [7]				
6. Weight [8]				
7. Nutrition [9]				
8. Cleanliness and condition of skin.[10]				
Head				
Body				
[IV.—*Special Conditions.*]				
9. Teeth [11]				
10. Nose and Throat [12]				
Tonsils				
Adenoids				
Submax. and cervical glands				
11 External eye disease [13]				
12. Vision [14]				
R.				
L.				

	I.	II.	III.	IV.
13. Ear disease [15]				
14. Hearing [16]				
15. Speech [17]				
16. Mental condition [18]				
[V.—*Disease or Deformity*] [19]				
17. Heart and circulation [20]				
18. Lungs [21]				
19. Nervous system [22]				
20. Tuberculosis [23]				
21. Rickets [24]				
22. Deformities, Spinal Disease, &c.[25]				
23. Infectious or contagious disease.[26]				
24. Other disease or defect.[27]				
Medical Officer's initials				

General Observations.

Directions to Parent or Teacher.

MEDICAL INSPECTION OF SCHOOL CHILDREN ( ).

No. of Inspection: I | II | III | IV

Name **Age:** *Years* *Months.* **Date of Birth** 19

Address **School**

Personal History: ("Yes" to be placed opposite corresponding disease, if child has suffered)

Measles	*German Measles*	*Scarlet Fever*	*Smallpox*	*Mumps*	
Whooping Cough	*Diphtheria*	*Chicken-pox*	*"Brain Fever"*	*Successful Vaccination*	1st ○○○ 2nd ○○○ (Cross out where scars are not present)
Rheumatic Fever	*"Rheumatism"*	*Growing Pains*	*Chorea (once—twice—thrice)*	*Sore Throats*	
Fits	*Epilepsy*	*Other Illnesses*	*Sleep Talking*	*Sleep Walking*	

Family History:

* *State if any cases of or deaths from this in the family*: *Consumption; Rheumatic Fever; Deafness; Other Tuberculous Complaints; Rheumatism; Other Complaints*

If other members of same household suffering from Tuberculous Complaints

Alcoholism

Nervous Disorders: *Asylum; Epilepsy; Chorea; Sleep Talking; Sleep Walking*

Special Observations

Instructions to Parent or Teacher

Re any weakness, defect, or disease specially unfitting child for ordinary school life or physical drill, or requiring either exemption from special branches of instruction or particular supervision.

Date of Inspection *Age* *Height* (without boots) {*English* / *Metric*} *Weight* (ordinary clothes / without boots) {*English* / *Metric*} *Standard*

Regularity of Attendance *Clothing: good—average—bad* *Footgear: good—average—bad* *Class*

Nutrition: good—normal—below normal—bad *Cleanliness: clean—somewhat dirty—dirty*

Muscular Development: Upper Extremities. Good—average—bad

Lower Extremities. Good—average—bad

Condition of Skin (*Body*) *Pediculi* *Eruptions*

Condition of Head: *Pediculi* *Nits* *Pustular Dermatitis* *Scurf* *Ringworm*

Hair: *Colour* *Condition*

Condition of Mucous Membranes

Heart and Circulation:

Heart's Apex Beat

Area of Cardiac Dulness: Superficial

Deep

Sounds

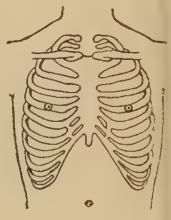
Eustace Smith's Bruit

Mediastinum

Pulse

Blood

N denotes normal



[One fourth of actual size].

Lungs (Symbols for use on Diagrams of Chest)

+ = *Tubular Breathing*
B = *Bronchial*
O○O = *Rales of various sizes*
? = *Rhonchi*
//// = *Dulness*
|||||| = *Resonance impaired*

Shape of Chest (place "Yes" opposite corresponding condition)

Oval — *Flattened under Clavicles* — *Round*
Lateral Furrows (over lower 3rd of chest junction of ribs with cartilage) — *Pigeon Breast* (Prominent sternum) — *Eversion of Lower Ribs*
Transverse Furrows (Rickety girdle) — *Depression over Ensiform Cartilage* — *Depression over lower part of Sternum*

Chest Measurement: *Expiration* ____ *inches* *Inspiration* ____ *inches*

Beaded Ribs

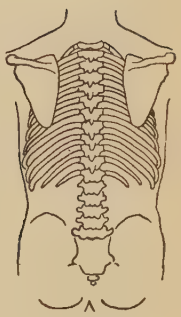
Position of Nipples

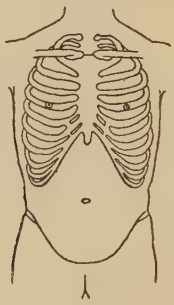
Liver

Spleen

Abdomen

N denotes normal





Urine: *Reaction* *Sp. grav.* *Albumin*

Prepuce: *Phymosis* *Adhesions*

Hernia: *Inguinal:* R L *Umbilical:*

External Abdominal Rings
- *Open* — R *Just felt—admits tip of little finger—little finger—index finger*; L *Just felt—admits tip of little finger—little finger—index finger*
- *Closed* — R; L

Nervous System:

(Omit testing Mental Capacity of Children under six years old.)

Mental Condition: Attention *Response* *Signs of Overstrain*
General Intelligence: Bright—Fair—Dull—Backward—Mentally Defective—Imbecile
Speech: Lisping—Stammering *Other Defects of Articulation*

Habit Spasm:

Paralytic Deformities: (a) *Birth*

(b) *Acquired*

[One fourth of actual size].

Bones and Ligaments:

(a) *Rickets (including Rickety Curvature of Spine)* *Joints enlarged* { *Elbows, Wrists, Knees, Ankles* } *Knock-knees* *Bow-legs*

Out-bowing of Tibiæ *Out-bowing of Femora* *Anterior bowing of Tibiæ*

(b) *Syphilis: Cranial Osteophytes*

(c) *Tubercle (including Spinal Disease)*

(d) *Deformities*

Spine (Lateral Curvature) (*Direction of curve to be indicated on diagram*) *Flat Foot* { R / L } *Weak Ankles* { R / L } *Club Foot* { R / L }

Lymphatic Glands: (*Simple Adenitis—Tuberculous—Hodgkin's—Syphilitic*)

Submaxillary *Posterior auricular* *Occipital* *Superficial cervical*

Deep cervical

Axilla *Elbow*

Mediastinal (anterior)

Bronchial

Abdominal (vide Abdomen)

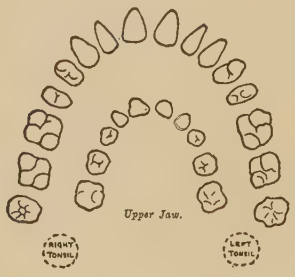
Inguinal

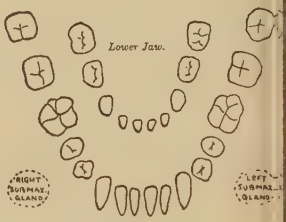
Teeth: *Clean—Somewhat dirty—Dirty*

N denotes normal

N.B.—*The test teeth are the permanent upper central incisors and the permanent 1st molars* { *× = Absent*; *c = Carious*; *s = Syphilitic**; *p = Enamel Pitted or Furrowed* } *Place these symbols on the diagrams of the corresponding teeth*

Syphilitic and normal teeth compared.





Condition of Mouth:

Nose and Throat:

(a) **Anterior Nares** *Mouth Breathing: Yes—No* *Nostrils* *Catarrh* *Discharge* *Septum nasi*

Hypertrophy of Nasal Mucous Membrane: Front *Back* *Polypi*

(b) **Naso-Pharynx:** *Discharge* **Digital Examination:** *Normal* *Mucous Membrane thickened* *Follicles palpable* *Stalactitic growth*

(*"Yes" to be placed opposite corresponding condition*) *Growth from pharyngeal wall* *Growth from vault* *Growth from pharynx and vault* *Naso-pharynx occluded by adenoids*

(c) **Tonsils:** *Normal* { R / L } *Enlarged* { R / L } *Tonsillitis* { R / L } *State of Follicles* { R / L }

(d) **Pharynx:** *Follicles* { *Hypertrophic* / *Exudative* }

(e) **Palate:** *Normal—Vaulted—Cleft*

[One fourth of actual size].

Eye:

(a) *Headache*

(b) *Conjunctiva.* *Muco-purulent Ophthalmia* *Membranous Ophthalmia* *Phlyctenular Ophthalmia*

(c) *Lids* *Blepharitis* *Granular Ophthalmia*

(d) *Cornea* R / L

(e) *Iris.* *Pupil* R / L *Colour* R / L

(f) *Lens* R / L

(g) *Muscles* *Intra-ocular* / *Extra-ocular* *Nystagmus*

(h) *Vision*

Snellen's Test Type at 20 ft. (6 metres).
(Not required for children under six years old)
If V be worse than ⅔, or if there be headache or eye-strain, examine further
R / L

(i) *Fundus Oculi*

R. E. *L. E.*

N denotes normal

Ear: *(If hearing be abnormal, or interfere with class work, tests to be applied in a general way to children under six years old)*

For test of hearing use forced whisper at 10 metres
Bad deafness under 2 metres
Medium ,, 2 to 4 ,,
Slight ,, over 4 ,,
The ears of any child who cannot hear whispers at 10 metres should be examined

(a) *Discharges* R
L

(b) *Hearing.* R *Whisper*
L ,,

(c) *Condition of Drum* R
L

(d) *Auditory Nerve* R
L

R. *L.*

Special Notes:

Medical Officer's Initials.

[One fourth of actual size].

DISCUSSION ON THE MEDICAL INSPECTION OF ELEMENTARY SCHOOL CHILDREN.

Dr. Fremantle (Medical Officer of Health, Hertfordshire) said he approached the matter from a different standpoint from that of Dr. Carpenter. As County Medical Officer his work was to superintend the work of medical inspection of 47,000 school children in thirty-three sanitary districts. The medical inspection should be considered as only part of the general administration of the public health; therefore it seemed far best to give the work of school inspection into the hands of district medical officers of health, most of whom were also in general practice. He was himself the School Medical Officer for the county, with sixteen assistants. The work in the schools was thus done by those who were or had been engaged in clinical work, and were in touch with the conditions under which the children lived. The medical inspection was to be carried out three times during the child's life. Dr. George Carpenter might say that was absurd, because so much might happen between those inspections; but it was an excellent beginning; government in Britain moved slowly, and later the inspections might be more frequent. The records of each child inspected were made on cards, 10 by 6 in., for purposes of filing. The scheme of examination drawn up by Dr. George Carpenter could not be more comprehensive, but the medical man who made such an examination would require corresponding remuneration. A record on this scale would not be worth having unless the examiners were paid at least one guinea per child. And if in his county 47,000 guineas were required to be paid for medical examination of the children, he, as a ratepayer, would strongly object; and if the educational authority were, as demanded by Dr. George Carpenter, to stand firm, the ratepayers would turn them out at the next local election. That showed the fundamental difference between Dr. George Carpenter's and his own points of view. The public were the ultimate masters, and the Board of Education took the view that the matter must only be carried as far as that public wished. The point was to so carry out the inspection as not to rouse parental objections, which the inspector, as the servant of the public, had no right to arouse. For that reason he looked upon the Circular 582 of the Board of Education as a masterly production. It went beyond anything hitherto attempted for our public elementary schools, and it was capable of great extension in the future. The results wanted were those likely to be of most use, and they were of two kinds: those that regard the individual child and those that regard the children in bulk, the school, the district, the county, the race, under varying *régimes* and in successive periods of time. For the former purpose the record was filed and kept in the school; for the latter a copy was filed at the county medical office. Those who took up the clinical point of view might criticise the system of reporting which had been adopted in the Hertfordshire schools, but it was practical and was found to work well. It must be

remembered that the remuneration was based upon an average rate of inspection of six per hour. Hence as little clerical work was required of the medical inspector as possible, while the information was required to be put in such a form that it could be easily summarised for the whole county, and be referred to for the most striking defects. The figure 3 was taken for the normal, regarded as the condition in any one particular which did not arouse the comment of the inspecting officer; 2 meant bad, 1 very bad. On the other side, 4 meant good, and 5 very good. Some inspectors subdivided these and used fractions; thus $2\frac{1}{2}$ was a condition below normal calling for little comment. Fuller details on many points were recorded in a space for general observations. By running through the cards of any one school and keeping the eye on the particular line, for instance, for ear discharge, a general idea, or a precise average, of the state of that school as to ear discharge was quickly obtained. A unity of standard was kept up by circulars and by personal supervision of the inspection by himself. He did not think the Section for the Study of Disease in Children ought to expect any large series of statistics, at least at this early stage. The main object of the inspection was the individual one, and the inspection should be done by men who lived among the children. Dr. George Carpenter contended that there should be examination, not merely inspection; but the Education Department saw no need as yet for a detailed examination. The twenty-four headings represented what the well-trained clinical mind would naturally pass through when looking at a child to see whether it was or was not healthy; the present object was to detect the most serious and widespread defects; not to detect the one-in-a-thousand defect. In future the system might be largely developed.

Mr. N. Bishop Harman said that when he looked through Dr. George Carpenter's schedule he was filled with admiration for Dr. George Carpenter's energy, and thankfulness that he was no longer an ordinary school doctor. Even if anyone could be found, either born or educated, with the capability of filling up all that was required in the schedule, he did not know of what use the result would be. Having got such a mass of information it would be necessary to call in a host of statisticians to discover what could be learned from such returns. It seemed to him that these elaborate schedules missed the whole object of the school medical inspection; the school doctor lived to discover defective children, and to get them treated as soon as possible, and he did not live to fill up elaborate schedules, though such things might delight the heart of a bureaucrat. He felt that Dr. George Carpenter's misdirected ingenuity was due to the fact that he had spent so great a part of his life in the wards and out-patient departments of children's hospitals, where all the children were necessarily diseased; so the fact of disease had become an obsession. What is true of a hospital is not true for a school; disease is not the rule. Most of those in that room had subnormal vision, as shown by the number of members who were wearing glasses, yet no one would suggest that they should pass a visual test before being admitted Fellows of the Royal Society of Medicine. Again, it struck

him forcibly that no one had mentioned the school teacher. He was the most important person in the whole school; the intelligent teacher—and they were intelligent nowadays—could tell more about the children under his charge than the medical inspector could posssibly learn by his unaided examination. What was chiefly wanted was, not more schedules and returns, but better arrangements for treatment, and especially places to send children to as soon as it was discovered that they had something wrong with them. The object was not to find out what proportion of children had defective umbilical scars, nor what was the size of the inguinal rings, but to get speedy treatment for teeth, ears, eyes, and other serious defects. This was the missing link between school inspection and the treatment of disease in children. He thought that school clinics could alone supply it; and that to the great advantage of the children and the medical profession. He had had six years of school doctoring, and he should count these days amongst his happiest. It was a change to leave a hospital crowded with disease and go to a school, where one was surrounded by hordes of merry children, of whom only a comparatively small proportion were diseased. He believed the cry of physical degeneration was an extremist cry and untrue, yet it was useful in so far as it created a stimulus to correct undoubted defects. Take venereal disease as it affected the eyes of the second generation: Of 22,000 children whom he examined in one year, only five had signs of ophthalmia neonatorum (it must be noted that the blind and partially blind had been removed to special schools). And only five of that same number had marks of interstitial keratitis. In answer to a doctor recently, he said his experience showed that not more than one in about 2000 children presented marks in eyes and teeth of inherited syphilis, and the doctor said he would have put it at even less. But the man who worked only at certain hospitals would repudiate the idea that there were so few.

Dr. G. E. Shuttleworth said his experience had been almost exclusively with children suffering from mental defects—he had not done much in the way of general school inspection. He had, however, sometimes had occasion to go into a school and pick out children for whom special instruction should be provided; he did that in all the elementary schools in Willesden, where he had more opportunity of seeing the other children in the schools than in his three years' experience under the London School Board, where children were brought from other schools as selected by their teachers, and it was necessary to decide between mental defect on the one hand and disability of some other kind. Very often the child was sent because it had been troublesome in the school, and then it had to be sent back again. It was not easy to make up one's mind as to a child being healthy and normal without going into some detailed examination. It was most important, for example, to decide whether the heart was sound, especially in view of fitness for school drill and for some exercises in particular. It had been said that the teachers could give information with regard to hearing and sight. But that was not always so; he had found children amongst the dullards at the back of the class who had been relegated

there because they were considered below the standard, but who were found to be quite alert though deaf, and who should have been placed in front where they could hear the teacher's voice more easily. The same was true of defects of vision, and on those points there should be a systematic examination of every child in a school. One speaker well said the whole question was the finding out of what children good could be done to by medical attention. But in what way could good be done for children whose parents would not listen to the warnings of the medical inspector? And it was evident from correspondence in medical journals that there was some difficulty in conveying that warning without giving offence to the general medical practitioner. He hoped that difficulty would be adjusted in time. For a medical man to conduct the inspection (as set forth by the Board of Education) properly in ten minutes was a good deal to expect, and he would like to know how long it would take with Dr. George Carpenter's schedule. He feared the whole matter had to be referred down to the question of cost, and the Board of Education was not the body chiefly responsible for that; it was much more the concern of the local authority. It had not yet been settled what share the Government would contribute to the cost, and if the expense proved to be very heavy to the local authority little sympathy from them could be expected. But both under the London School Board and the Willesden authority he had been allowed a good deal of latitude in his own special work, the only difficulty being how to accomplish what one wanted to do in the time. It had been sometimes arranged for him to examine about twenty cases in two and a half hours, and it seemed important that the examiner should not have more cases than he could properly examine in a given time, if reliable observations were to be secured.

Dr. Dan McKenzie said there were two strongly opposed policies before the meeting—one voiced by Dr. George Carpenter and the other by Dr. Fremantle. Yet it was not difficult to feel some sympathy with both, and in this country of compromise our task was to strike the happy mean. Dr. Fremantle seemed to have shown that the inspection need not be so thorough as Dr. George Carpenter advocated. It would be a long time before parents as a whole saw the need of the measures which the medical man might think to be necessary. Under the circumstances, he thought the Board of Education's document was as much as could be reasonably expected at present. Certain defects in children were discovered by even the most superficial examination. But was the examination the end of the matter? There was the question of treatment to be discussed. It could be suggested to the parent that the child should be treated, or school cliniques could be formed, or the children could be treated by the general practitioner in charge of the child, or finally at special institutions like hospitals. Many of the parents would pay no attention to the warning. There was much in favour of the formation of school cliniques in certain parts of the country, but in London the existing hospitals should be utilised for the purpose. He agreed that examination for adenoids by the only sure way—namely, by the finger in the naso-pharynx—was sure to cause

opposition, but in time the teachers would be able to point out the children suspected of having them, and those only need be examined by the medical inspector.

Mr. Rose said that 85 per cent. to 90 per cent. of children had dental caries. Armed with a dental mirror and probe the work of inspecting the child's mouth was not difficult. He thought the degree of sepsis rather than the degree of dirt should be the phrasing on the form. The chief points as to treatment should be whether the teeth required stopping or extraction. The question of whether the teeth were syphilitic was not of much practical importance. The important point to bear in mind was whether the object of the inspection was for the purpose of collecting statistics or simply a preliminary to treatment.

The Chairman (Mr. Sydney Stephenson) proposed: "That this meeting requests the Council of the Section for the Study of Disease in Children to form a committee to consider, and later to report on, the facts which have been brought before it by Dr. George Carpenter and other speakers in the discussion on the medical inspection of school children." This was unanimously agreed to.

ABSTRACTS FROM THE MEMORANDUM ON MEDICAL INSPECTION OF CHILDREN IN PUBLIC ELEMENTARY SCHOOLS.

BOARD OF EDUCATION, CIRCULAR 576, NOVEMBER 22nd, 1907.

Scope and Purpose of the Act.

1. The Education (Administrative Provisions) Act, 1907, in so far as it concerns the medical inspection of school children, is the outcome of a steady movement of public opinion throughout the entire community. For some years past evidence has been accumulating that there exists in certain classes of the English people a somewhat high degree of physical unfitness which calls for amelioration, and, as far as possible, for prevention. The Legislature resolved that to grapple effectively with this problem, or at least part of it, it was necessary first to improve the health conditions, both personal and in regard to environment, of the children of the nation. A consideration of the gravity of the need led to the conclusion that medical inspection of school children is not only reasonable, but necessary, as a first practical step towards remedy. Without such inspection we not only lack data, but we fail to begin at the beginning in any measure of reform. The reasonableness of such inspection, if it is conducted on sensible lines leading to an improvement of the surroundings and physical life of the children, must become evident both to their parents and to the nation as a whole.

The Board desire therefore at the outset to emphasise that this new legislation aims not merely at a physical or anthropometric survey or at a record of defects disclosed by medical inspection, but at the physical improvement, and, as a natural corollary, the mental and moral improvement, of coming generations. The broad requirements of a healthy life are comparatively

few and elementary, but they are essential, and should not be regarded as applicable only to the case of the rich. In point of fact, if rightly administered, the new enactment is economical in the best sense of the word. Its justification is not to be measured in terms of money, but in the decrease of sickness and incapacity among children and in the ultimate decrease of inefficiency and poverty in after life arising from physical disabilities.

2. The section of the Education (Administrative Provisions) Act, 1907, which concerns medical inspection of school children (section 13) is as follows:—

"13.—(1) The powers and duties of a local educational authority under Part III of the Education Act, 1902, shall include—

[(*a*) Power to provide for children attending public elementary schools, vacation schools, vacation classes, play centres, etc.]

(*b*) The duty to provide for the medical inspection of children immediately before or at the time of or as soon as possible after their admission to a public elementary school, and on such other occasions as the Board of Education direct, and the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools:

Provided that in any exercise of powers under this section the local education authority may encourage and assist the establishment or continuance of voluntary agencies and associate with itself representatives of voluntary associations for the purpose.

(2) This section shall come into operation on the first day of January nineteen hundred and eight."

From this it will be seen that two main provisions are incorporated in the section, namely, first, the duty, laid upon all Local Education Authorities, of the medical inspection of children at a stated time and on such other occasions as the Board of Education may direct; and secondly, the power given to all Local Education Authorities of making arrangements, to be sanctioned by the Board, for attending to the health and physical condition of the children in elementary schools.

3. Almost all Local Educational Authorities have taken steps of some kind in the promotion of school hygiene, and many have conducted some form of medical inspection. Hitherto, however, such inspection has been concerned only or chiefly with children selected from the school or class as being in some way obviously defective or diseased. The general routine, where such inspection has been practised, has been for a medical man to visit schools at intervals, make a sanitary survey of the buildings, and examine more or less thoroughly children presented to, or selected by, him. Such cases have, however, as a rule, been imperfectly followed up and much of the advice given has been ignored or inappropriately applied. Much also has been left undone in the way of adapting the methods of teaching to the special physical needs of the children. Moreover, in many districts not only have serious defects of sanitation, such as bad lighting and lack of ventilation, injuriously affecting the children, been ignored, but even the means of preventing the extension of infectious diseases have been neglected in greater or less degree. The present Act is not intended to supersede the powers which have long been exercised by Sanitary Authorities under various Public Health Acts, but is meant to serve rather as an amplification and a natural development of previous legislation.

It is founded on a recognition of the close connection which exists between the physical and mental condition of the children and the whole process of education. It recognises the importance of a satisfactory environment, physical and educational, and, by bringing into greater prominence the effect of environment upon the personality of the individual child, seeks to secure ultimately for every child, normal or defective, conditions of life compatible with that full and effective development of its organic functions, its special senses and its mental powers which constitute a true education.

Organisation.

4. The respective functions of the Board of Education and the Local Education Authorities are clearly defined by the Act. The duties thrown upon the Board consist in advising Local Education Authorities as to the manner in which they should carry out the provisions of the Act, and in supervising the work they are called upon to undertake; in giving such directions as may be necessary regarding the frequency and method of inspection in particular areas; and in considering and sanctioning such arrangements for attending to the health and physical condition of the children as may be submitted to them by individual Authorities. The Board will also collate the records and reports made by the Authorities and will present an annual report to Parliament.

The duty of carrying out the actual inspection has necessarily been entrusted by Parliament to the Local Education Authorities and not to the Board. Each Authority must therefore in due course appoint such Medical Officers or additional medical assistance as may be required for the purpose. Some time must inevitably elapse before all Authorities have their arrangements in working order, but it should be carefully borne in mind that, although the work is begun gradually, the initial organisation established by each Authority should admit of such expansion as will secure the thorough and efficient administration of the Act. In subsequent paragraphs some general guidance is given as to the minimum amount of inspection required.

5. In view of the varied influences which affect, directly or indirectly, the health of the children of the nation, it is manifestly of the highest importance that the administration of this Act should rest upon a broad basis of public health, and should not only secure for Local Education Authorities as much freedom as is consistent with adequate uniformity in the presentation of results for comparative purposes, but should also use to the utmost extent the existing machinery of Medical and Sanitary Administration, developing and supplementing it as required, rather than supplanting it by bringing into existence new agencies, partially redundant and possibly competing.

The Board view the entire subject of school hygiene not as a speciality or as a group of specialities existing by and of themselves but as an integral factor in the health of the nation. The application of this principle requires that the work of medical inspection should be carried out in intimate conjunction with the Public Health Authorities and under the direct supervision of the Medical Officer of Health.

6. It is unnecessary to emphasise the objections to a dual jurisdiction in such matters as the sanitary control of school premises and the notification and prevention of the spread of infectious diseases in which the duties of the Medical Officer of Health and the School Medical Officer necessarily and obviously overlap. If they are to be effectively carried out the interests

and activities of the School Medical Officer must extend over the whole external environment of the child. School hygiene cannot be divorced from home hygiene, and this in turn is intimately bound up with the hygienic conditions of the community. Efficiency and economy require, therefore, an organic relationship between the daily work of the school authority and of the authority responsible for the administration of the wider branches of public health, including the supervision of water and milk supplies, food, housing and sanitation, inquiries into matters affecting infant mortality (including ante-natal influences), home visiting by men and women inspectors, sanitary and bacteriological investigations, the provision of hospital accommodation, disinfection, the cleansing of verminous persons, the notification of the prevalence or otherwise of diseases, such as phthisis, affecting the adult population, and the consideration of social factors, such as the occupation of the parents, or the health, habits, and physical conditions of the family, all of which have a bearing, direct or indirect, upon the children's health.

Subsidiary Agencies.

8. The Board are convinced that the work of medical inspection cannot be properly accomplished by medical men without assistance. The teacher, the school nurse (where such exists), and the parents or guardians of the child must heartily co-operate with the school medical officer. In whatever way the system be organised, its success will depend, immediately and ultimately, upon the cordial sympathy and assistance of the teachers. Some Authorities will find that the teachers are able to undertake, without undue strain, a share of the work of furnishing data respecting each child, and even perhaps to carry out some portion of the inspection; and it is clear that the successful application of the principles of hygiene to school life will depend almost entirely upon their efforts. What the mother is in the home the teacher is in the school. Experience shows that when the teachers understand the necessities and opportunities of the situation they are both willing and able to take their share. Their co-operation in the work already done in this direction has been beyond praise. The school nurse and health visitor are also important agents in school hygiene. They may serve as links between the school and the home, and can assist in recording the results of inspection, in securing and maintaining personal cleanliness, and in carrying out medical advice concerning simple complaints. They are also able to give counsel in the home, to visit the children at home or in the school, and in many other ways to advance the cause of school hygiene. The Board are satisfied that this work offers a great field of valuable service for the school nurse, and they recommend that, wherever practicable, Education Authorities should secure, especially in rural districts, the benefit and true economy which may be thus obtained. It is essential, however, that the teacher, school nurse, or health visitor assisting in the administration of this Act should act strictly under the instruction and supervision of medical authority. Nor must the influence which the parent can exercise by example and precept be neglected. One of the objects of the new legislation is to stimulate a sense of duty in matters affecting health in the homes of the people, to enlist the best services and interest of the parents, and to educate their sense of responsibility for the personal hygiene of their children. The increased work undertaken by the State for the individual will mean that the parents have not to do less for themselves and their children, but more.

It is in the home, in fact, that both the seed and the fruit of public health are to be found. All-round co-operation between school medical officer, teacher, nurse, health visitor, and parent will prove both effective and economical, and the full utility of the Act will not be secured unless, in advising Local Education Authorities, the medical officer pays careful attention to considerations of expenditure and to the relative urgency of the reforms he proposes to undertake.

Character and Degree of Medical Inspection.

9. From what has been said it will be clear that the fundamental principle of section 13 of the new Act is the medical examination and supervision not only of children known, or suspected, to be weakly or ailing, but of all children in the elementary schools, with a view to adapting and modifying the system of education to the needs and capacities of the child, securing the early detection of unsuspected defects, checking incipient maladies at their onset, and furnishing the facts which will guide Education Authorities in relation to physical and mental development during school life. It is evident that—although this work involves (*a*) medical inspection of school children at regular intervals, (*b*) the oversight of the sanitation of the school buildings, and (*c*) the prevention, as far as may be, of the spread of infectious and contagious diseases, including skin diseases—action in these three directions will be incomplete unless (*d*) the personal and home life of the child are also brought under systematic supervision. The home is the point at which health must be controlled ultimately.

The character and degree of medical inspection will depend on the standpoint from which the subject is viewed, the difficulty being of course to attain a due sense of proportion and uniformity, particularly as to fundamental points. Valuable to science though the findings of a more thorough and elaborate medical examination might be, it is the broad, simple necessities of a healthy life which must be kept in view. It cannot be doubted that a large proportion of the common diseases and physical unfitness in this country can be substantially diminished by effective public health administration, combined with the teaching of hygiene and a realisation by teachers, parents, and children of its vital importance. The spread of communicable diseases must be checked; children's heads and bodies must be kept clean; the commoner and more obvious physical defects, at least, must be relieved, remedied, or prevented; schoolrooms must be maintained in cleanly condition, and they must be properly lighted, well ventilated, and not overcrowded; the training of the mental faculties must not be divorced from physical culture and personal hygiene. It is these primary requirements which must first receive attention.

10. The directions given in this circular as to the degree and frequency of inspection refer only to the minimum medical inspection, the effectiveness of which will in future be one of the elements to be considered in determining the efficiency of each school as a grant-aided school. They are not intended to exclude other medical work, which the Board trust will be undertaken by Local Education Authorities according to their abilities and opportunities. For example, the re-testing of the eyesight of every child periodically would be most valuable; an annual measurement of height and weight; the more frequent examination of particular children, especially of those suspected to be suffering from deficient nutrition or found to be defective at former inspections; careful anthropometric surveys or special inspections at various

ages of school life; and similar investigations of a special nature undertaken in particular districts, come within the category of additional medical work wholly desirable where practicable, and calculated to advance school hygiene. Such work, however useful, should be looked upon as subsidiary to the main purpose of the Act.

11. A consideration of these matters has led the Board to the conclusion that as far as practicable the statutory medical inspection should, at entrance or at subsequent inspection, take account of the following matters:

(1) Previous disease, including infectious diseases.
(2) General condition and circumstances—
  (*a*) Height and weight.
  (*b*) Nutrition [good, medium, bad].
  (*c*) Cleanliness [including vermin of head and body].
  (*d*) Clothing [sufficiency, cleanliness, and footgear].
(3) Throat, nose and articulation [mouth-breathing, snoring, stammering, tonsillar and glandular conditions, adenoids].
(4) External eye disease and vision testing.
(5) Ear disease and deafness.
(6) Teeth and oral sepsis.
(7) Mental capacity [normal, backward, defective].
(8) Present disease or defect: [(*a*) Deformities or paralyses; (*b*) Rickets; (*c*) Tuberculosis (glandular, pulmonary, osseous, or other forms); (*d*) Diseases of skin and lymph glands; (*e*) Disease of heart or lungs; (*f*) Anæmia; (*g*) Epilepsy; (*h*) Chorea; (*i*) Ruptures; (*j*) Spinal disease; (*k*) Any weakness or defect unfitting the child for ordinary school life or physical drill, or requiring either exemption from special branches of instruction or particular supervision].

It is unnecessary to discuss here the advisability or otherwise of including in a minimum inspection the various points appearing in this summary, or to add that commonly the findings as to organic defects will be of a negative character, the positive facts of the inspection being relatively few, and in part obtainable by the trained teacher or school nurse. (*See* par. 15.) Moreover, some of the above conditions will not require investigation in children on admission, when this takes place at or under five years of age. On the other hand, some defective children will require a more thorough examination than this minimum. Reasonable latitude must be allowed, and the summary must be taken only to indicate the points upon which the Board desire as much uniformity as possible in the minimum medical inspection, and must be adapted to the age-period. The Board propose to issue at an early date an examination form suitable to this inspection.

Regulations.

12. The Board have decided under section 13 of the Act that *not less than* three inspections during the school life of the child will be necessary to secure the results desired.* The first inspection should take place at the time of, or as soon as possible after, admission to school; the second at or about the third year (say, the seventh year of age); and the third at or

* There will be special areas where the Board may from time to time require that the inspection should be at shorter intervals and of a more searching character, and also areas in which, owing to largeness of size of population, some exception may have to be made in the early years by way of reduction of the burden per annum.

about the sixth year of school life (say, the tenth year of age). A further inspection immediately before the departure of the child into working life would be desirable where practicable, and in some areas it may be best for this to take the place of the third inspection. Certain adjustments will be necessary in working out any standard in practice, as it will at once be evident that without such adjustment the first year (1908) would be unduly burdened with the inspection of the children newly admitted and of all the children already in school.

Provision should be made by each Authority, when the Act has been sufficiently long in operation to be in normal working, for the inspection in each year of (*a*) the children newly admitted; (*b*) the children in the school who in that year had matured for their second inspection; (*c*) those who had matured for their third inspection; and were practicable (*d*) those about to leave school might also be inspected. But in the first year (1908) it may prove impracticable to attempt more than the inspection of the children newly admitted and those leaving school; and in the second year (1909) the Board will be satisfied with the inspection of those newly admitted and those leaving, with the addition of children who have matured for their second inspection (which is perhaps the occasion of all others requiring the most thorough examination). Some such adjustment would tend to equalise the burden over successive years. It will be understood that the precise way in which the children are grouped in the school for medical inspection will vary according to the internal organisation and circumstances of each school. It may be most convenient, for instance, to carry out the inspection on an age basis rather than on a basis of period of school life. In subsequent years the Board may issue notice modifying the age periods for inspection in order to obtain facts respecting child physique at ages other than those included above.

The Board recommend that each Local Education Authority should encourage one or both of the parents of the child to be present at the first inspection, and to this end a notification should be sent to the parents as to the time and place at which it will take place. Whilst some trouble may be involved in inviting the parents, the Board believe that substantial gains would thus be secured, for by this means misunderstandings will be avoided and prejudice will be disarmed. Moreover, the parent is able to facilitate examination and provide information, and the medical inspector's opinion could be given clearly and directly to the persons most nearly concerned.

REPORT OF THE BOARD OF EDUCATION FOR THE YEAR 1907—1908.

Medical Inspection.

In November, 1907, the Board issued a Memorandum (Circular 576) explaining the principles by which the administration of section 13 of the Education (Administrative Provisions) Act, 1907, relating to the medical inspection of school children, should, in their opinion, be regulated. This section of the Act came into force on the 1st January, 1908, and the experience of the Board since that date has confirmed their belief in the soundness of the principles which they had previously adopted. The Board are aware that the application of those principles must vary accord-

ing to the special circumstances and needs of different localities, and they fully appreciate the fact that the administration of the Act involves many practical problems which can only be solved by experience, and which in the first instance must be dealt with tentatively and provisionally. They are, however, convinced that the general lines laid down in their first Memorandum are those which must be followed if the organisation of Medical Inspection is to be placed on a broad and sound basis.

The Board's first Memorandum on this subject was followed in February, 1908, by a Model Schedule indicating the ground which should be covered by the Medical Inspection of school children and an explanatory Memorandum (Circular 582).

The schedule was purposely made comprehensive, and its apparently detailed character is not inconsistent with the statement in the Memorandum that the inspection of a child should not *on the average* take more than a few minutes. The experience of those Local Education Authorities who have made substantial progress with the work has confirmed the Board's opinion in this respect.

A further Memorandum (Circular 596) was issued by the Board on August 17th, 1908. It was explanatory of the articles concerning medical inspection inserted in the Code of 1908, and gave guidance to Local Education Authorities on several matters of administration. The functions of the School Medical Officer under the Code and the relation of the School Medical Service to the Public Health Service were discussed; the requirements made with regard to the provision for medical inspection in respect of the year ending 31st July, 1909, were explained; and some indication was given as to the scope of the annual report of the School Medical Officer and the various methods in which medical inspection might be followed by arrangements for attending to the health and physical condition of children educated in public elementary schools.

Miss Janet Campbell, M.D., formerly one of the School Medical Inspectors under the London County Council, has been appointed to assist in the Medical Department of the Board.

In view of the short period during which the Act has been in force the Board do not consider it desirable that they should attempt in the present Report to give an account of its working. They are satisfied that substantial progress in the organisation of the work is being made throughout the country, and that, with few exceptions, Local Education Authorities are doing their best to perform the duties which Parliament has imposed on them.

They hope to issue a Special Report shortly, which will give detailed information as to the steps taken by the various Local Authorities in this important matter since the passing of the Act.

THE ORIGIN OF THE FEEBLE-MINDED.*

By W. A. Potts, B.A.Cantab., M.D.Edin., M.R.C.S.Eng.,
Late Medical Investigator to the Royal Commission on the Care and Control of the Feeble-minded.

(*Concluded from page* 121.)

As regards alcohol we have divergent views; much that is extravagant has been written on both sides. I have already shown that if it injuriously affects the individual, it may also tell on the sperm or germ cells. Indeed, Dr. Claye-Shaw has pointed out that alcoholic amenorrhœa and dysmenorrhœa are evidences of the effect on the genital system of the mother. Such an agent as alcohol sometimes acts indirectly, for Dr. Mott has shown that even if injurious *per se* it may weaken the defence against other noxious agencies, such as the absorption of toxins from the alimentary tract. Some of Professor Dixon's recent work has clearly established the fact that alcohol facilitates the absorption of toxins of all kinds. Really it is partly a question of degree and partly a question of the other bad influences. If a healthy man drinks to excess for a time his offspring may apparently go unscathed; but if the victim of tubercular or cardiac disease indulges to the same extent, there is less chance for the children, who also nearly always suffer when the indulgence is continued over a long period of time. I have heard it suggested that an alcoholic begetting often explains amentia; I have never seen any evidence to prove this, and it seems improbable that drunkenness on one occasion should have such an effect. There is no doubt, however, that bouts of drinking in the case of married couples, who have permitted themselves immoderate alcoholic indulgence in the first few days of the honeymoon, but have otherwise led lives of temperance, have conduced to feeble and imbecile first-born children. The late Dr. Lloyd Andriezen† collected definite evidence on this point.

I could detail to you experiments as to the effects of alcohol on the developing embryo, and also records of the results to the offspring of administering alcohol to animals before or after conception. Such investigations are, however, only suggestive; we are not dogs or hens; other ingredients in our diet besides alcohol would not suit

* Read at the Birmingham Branch of the British Medical Association, on March the 11th, 1909.

† W. Lloyd Andriezen, "The Problem of Heredity," 'Journal of Mental Science,' vol. li, 1905.

a horse, and none of us would thrive on the daily menu of a rabbit. The most convincing evidence is obtained by comparative investigations; individual cases prove nothing—it is all a question of per cents. and probabilities. In Birmingham in the investigations among children I found alcoholic antecedents in 41·6 per cent. of the mentally defective, but only in 22 per cent. of ordinary children. It was noteworthy that only in 1 per cent. of normal children were both father and mother alcoholic, while among the feeble-minded the figure was 5·2 per cent. My figures corroborated Dr. Bevan Lewis's statements about the danger of maternal drinking. The most extensive investigation of this kind is that of Dr. MacNicholl, of New York, in 1901. An enormous number of school children were examined, and the family histories of 3711 traced through three generations with great detail in regard to the taking of alcohol. Dividing them into two classes, viz. those free from hereditary alcoholic taint and those with that taint, we find:

(1) Of those free from hereditary alcoholic taint 96 per cent. were proficient and 4 per cent were dullards.

(2) Of those with hereditary alcoholic taint 23 per cent. were proficient and 77 per cent. were dullards, and of these more than one third were very deficient.

A close investigation of these records shows that often it is not drinking on the part of the parents, but in an earlier generation, that does the mischief. We sometimes find that when a man drinks to excess his children are not, strictly speaking, feeble-minded, but as they grow up they turn out to be neurotic, peculiar or eccentric; such people sometimes join the ranks of the total abstainers, and yet one or more of their offspring shows regular amentia. The suggestion that alcoholism is to blame naturally causes the keenest distress to such people and their friends. We should always remember the possibility of delay in the full effects of alcoholism, and also, of course, that alcohol is only one of the agents that may lead to mental weakness. As records from the other side of the Atlantic are not always accredited here, I may say that these results are confirmed by the comparative studies of Demme in Berne, and by the observations of Dr. Sullivan, Dr. Ettie Sayer and others in this country. Last October I read a paper in London on "The Relation of Alcohol to Feeble-mindedness" before the Society for the Study of Inebriety; it was published in the January number of the 'British Journal of Inebriety,' so I will now cut a long story short by stating the conclusions I drew then: "The evidence is not clear that alcoholism, by itself, in the father

will produce amentia, but it is quite plain that in combination with other bad factors it is a most unfavourable element, while maternal drinking, and drinking continued through more than one generation, are potent influences in mental degeneracy."

Syphilis is always regarded as a possible factor, but has usually only been detected in quite a small percentage; Dr. Shuttleworth's figure was 2 per cent., and mine, which was one of the highest, 4 per cent. Much important work, however, has been done on this subject by Dr. Mott, whose observations are recorded in the 'Archives of Neurology'; he has proved that looking for syphilitic stigmata in the mentally degenerate case only is quite insufficient. In many instances of amentia he has found no other signs of syphilis in the patient, but has found another member of the family with syphilitic notched teeth, and another without any external sign, but with severe visceral and brain disease. As Dr. Mott himself says, a poison sufficiently powerful to kill the embryo either before or shortly after birth must have a devitalising effect on the offspring that survives, and this he most certainly proves. In the case of the last patient brought to me there was a clear history of syphilis in the father, yet the child was good looking, well formed, and showed no sign of congenital syphilis other than imbecility. The conditions described so far are the outstanding causes of mental defect; it follows, however, from the relations of the germ-cells to their environment, that such conditions as cardiac disease, and, indeed, constitutional diseases of all kind, though insufficient of themselves to determine amentia, are contributory factors; I could put before you family histories clearly proving this.

In conclusion, I will refer briefly to one or two injurious influences not universally recognised. Sir James Crichton-Browne, in the course of his interesting evidence to the Commission, said: "One cause productive of idiocy or feeble-mindedness, operating during utero-gestation, and deserving of careful attention at this time, is attempts to procure abortion. Where that is instrumentally attempted without success, injury may be done to the head of the fœtus, and where drugs are used, these may disastrously interfere with its nutrition and growth . . . These attempts at abortion, and also the practices employed to prevent pregnancy with a view to the restriction of the family, are said by all the physicians who gave evidence before the New South Wales Commission to have a detrimental effect on the nervous system of the woman, producing hysteria, neurasthenia and mental disturbance, and thus acting unfavourably on the health of any children who may be subsequently

born." In corroboration of these ideas stands the case of one of my patients, born of healthy parents, and whose later born brothers and sisters were normal; the mother herself told me that she attributed the eldest child's defect to the fact that she was not married till the fifth month; during the earlier part of pregnancy she was in a state of the greatest anxiety, took a large amount of medicine to procure an abortion, and with the same object repeatedly undertook severe physical exertion.

At this point I may remind you that the suggestion that the midwifery forceps are often to blame was disproved by the late Dr. Langdon Down; the more recent idea has been that during birth more harm is done by the prolonged compression due to obstructed labour, or by suspended animation at birth. So far as my own observations have gone the asphyxia of new-born infants has not been the prelude to mental weakness; I hope, however, before long to be able to bring forward definite evidence on this point. Of course, if the asphyxia is due, not so much to difficulty in birth as to inherent weakness, amentia is merely one of the abnormalities we might expect at a later stage if the child survived.

Recently my attention has been directed to *severe* illness of one of the parents shortly before conception as a possible cause; in one instance a lady who was engaged to be married developed typhus fever while abroad; she was dangerously ill, and on recovery her doctor, a shrewd man, advised her to postpone her marriage for two years, as otherwise the eldest child might be abnormal. This advice was discarded and the marriage took place at an early date; the eldest child was a mental degenerate of a peculiarly vicious and immoral type. I have elsewhere recorded two cases in which the blame was laid, and to some extent rightly, on severe attacks of smallpox from which the father suffered some twelve months before the child was born. Whether we admit such an explanation or no we can scarcely deny that the condition of the mother during utero-gestation powerfully affects the nutrition of the fœtus and the start in life of the child. In one of my patients the mental abnormality was due to the mother having typhoid fever at the fifth month. Sir James Crichton-Browne has recorded the case of an idiot whose mother, during pregnancy, had an attack of Asiatic cholera; her other children, born both before and after this idiot, were perfectly healthy. The same authority has also something to say on the possible far-reaching effects of the neglect of breast-feeding, and the use of condensed milk and proprietary foods for infants; the intestinal irritability so induced may, in those who inherit a tendency

to nervous instability, lead to convulsions, which retard cerebral development and may lead to idiocy or be the precursor of true epilepsy. At any rate, the fine edge of talent may be blunted and the mind permanently weakened. It might be ludicrous to ascribe a case to such a cause and to nothing else, but as a last word I would say that evidence is pouring in from all sides that everything which interferes with true hygiene does contribute to increase the present appalling number of incapable members of the community.

Editorial.

THE MEDICAL INSPECTION OF ELEMENTARY SCHOOL CHILDREN.

The Medical Inspection of School Children is being performed all over the country, and is of such great importance that we have deemed it imperative to devote this number of the Journal to its special consideration. Many different views appear to be held as to what is meant by medical inspection of school children, and in order that these views may be thoroughly understood, we have published the opening paper which contains circular 582 of the Board of Education, and the discussion on the subject at the Section for the Study of Disease in Children at the Royal Society of Medicine, together with circular 576 and the Report of the Board of Education. Upon consideration of the Schedule of Medical Inspection and the notes for the inspecting officer in circular 582, it is obvious that a medical examination of a very searching character is expected. Such an examination as indicated in the circular cannot be performed without the whole of the children's clothes being removed, and yet the Medical Officer of the Board of Education appears to think that to undress children for the purpose of medical examination is superfluous, and that the heart can be properly examined by exposing a small area of skin in the neighbourhood of the left nipple. That the children are expected to be completely stripped of their clothes for the medical examination is shown in note 10 of circular 582, which reads as follows: "The skin of the body should be examined for cleanliness, vermin, etc. . . At the same time ringworm and other

skin diseases should be looked for." There are many other indications in the notes that this preliminary procedure is considered necessary. It is obvious to every educated medical practitioner that no satisfactory physical examination can be made without complete removal of the child's clothing.

The Board of Education requires a complete examination of the children, and for this purpose has issued a schedule for general use, which contains the *minimum* that is considered necessary for efficient medical inspection. It is suggested that when the ordinary inspection shows that a more searching medical examination is needed a supplementary blank form should be used, in which the defects or diseases should be fully recorded. A complete form for the examination, therefore, has not been issued, and the central authority has left to the local education authority the responsibility of drawing up such a schedule as they may consider will meet the requirements of the Act. These schedules will be different all over the country, and, therefore, the information that is contained in them will be difficult to unravel and scarcely possible to compare. We are strongly of the opinion that it would have been better policy for the Board of Education to have prepared a complete schedule for the guidance of the school examiners, and not to have laid the responsibility upon the local education authority. Whatever be the form of the schedule decided upon by the local authority, the medical officer, if he makes a complete examination of the children in accordance with the "Notes for Inspecting Officer," will have many complaints raised against him by the parents, and it does not appear that he is likely to have the support either of the local or the central authority. He will have to bear all the responsibility and the unpopularity upon his own shoulders. If, on the other hand, the medical officer simply makes a superficial examination of the children everything will go easy for him, but his records will be worthless, and the work that he performs a great waste of large sums of public money.

In the Report of the Board of Education for the year 1907–1908, under the heading of "Medical Inspection" there appears the following paragraph: "The schedule was purposely made comprehensive, and its apparently detailed character is not inconsistent with the state-

ment in the memorandum that the inspection of a child should not *on the average* take more than a few minutes. The experience of those local education authorities who have made substantial progress with the work has confirmed the Board's opinion in this respect." We entirely disagree with this view, for we are strongly of the opinion that if each examination is properly carried out in accordance with the instructions of the Board of Education it must take more than a few minutes on the average. The more the schedule, which contains the minimum amount of facts to be elicited, is studied, the more improbable does it seem that the examination can be performed in such a short space of time.

The detailed examination which is required can only be efficiently carried out by especially trained medical practitioners, and it appears doubtful whether some of the medical officers appointed have had sufficient experience in the diseases of children to be able to perform it. The great discrepancies in many particulars in some of the returns already received prove how widely different the experiences of many of the examiners must be. This, however, will remedy itself, for the experience of the medical officers will increase as they continue to perform their duties of inspection. Until their experience is riper the value of their returns must be small, and therefore it must be a few years before any reliance can be placed upon the statistics which are produced.

The Board of Education has a difficult problem before it in order to make the medical examination of school children thoroughly efficient, but when detailed information has been received from the various local authorities as to the working of the Act, then it will be possible for the inspection to be made more systematic by the Board of Education drawing up a fully detailed schedule to be used all over the country. Unless such a schedule is drawn up we consider that many of the results of the examination of the children will be lost, and thereby much valuable work and public money wasted.

The good results which may arise from a systematic medical examination of elementary school children can hardly be overestimated, and are thoroughly appreciated by the medical profession, but in order that the greatest benefit may be obtained, the manner

in which the examinations should be performed must be fully discussed, and, therefore, we hope that by devoting this number of the British Journal of Children's Diseases to the special consideration of the subject, we may help to show how the very important work which is provided for in Section 13 of the Education (Administrative Provisions) Act, 1907, can be best undertaken.

The Royal Society of Medicine.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

Friday, February the 26th, 1909, at 5 p.m.

Mr. Sydney Stephenson *in the Chair.*

A Case of Cerebral Diplegic Spasticity in a boy, aged 6 months, which came on with rigidity in the back and limbs and retraction of the head, at the age of seven weeks, was shown by Dr. Higgs on behalf of Dr. Cautley. On admission to hospital three weeks ago there was general rigidity, which varied from time to time, and would come on with spasms with considerable crying. The boy improved on a mixture of bromide and chloral. Mr. Bishop Harman found the left disc unduly red with a few pigment-spots along the course of one vessel. The condition was ascribed to an attack of encephalitis followed by cerebral sclerosis of the motor region.

A Sketch of the Pigment-Spots, which might be termed "congenital warts," was shown by Mr. Bishop Harman.

A Boy, aged $4\frac{1}{2}$ years, suffering from Abdominal Tuberculosis was shown by Dr. Higgs on behalf of Dr. Cautley. The abdomen was enlarged with a band stretching across the upper part, giving the impression of a coiled up and matted omentum containing caseous matters. He had been treated with tuberculin. The opinion of members was asked on the advisability of attempting the removal of the caseous matter by surgical means, or on a continuance of the general methods of treatment and larger doses of tuberculin.

Dr. Milner Burgess said that if the lungs were not affected he would advise operation.

Dr. Higgs replied that although there was no evidence of infection of the lungs he thought the case should not be operated upon, as some of the masses were probably due to inherent coils of intestine and contained caseous glands.

A Mongolian Imbecile, aged $7\frac{1}{2}$ months, was shown by Dr. Higgs on behalf of Dr. Cautley. The case showed brachycephaly, a large fontanelle,

palpebral apertures sloping upwards and outwards, inability to sit up, placidity and good nature.

A Child, aged 1¾ years, with a Soft, Doughy Swelling situated over the right half of the vertical portion of the frontal bone, and extending into the right upper eyelid and also into the temporal and parietal regions, was shown by Mr. Sydney Stephenson. It was adherent to the overlying skin and a cord-like feeling can be made out in some parts of it. The child is said to have attended the Moorfields Hospital for buphthalmos, and was brought to hospital on January the 21st with acute inflammatory œdema of the right upper eyelid. It was impossible to say for certain what the condition was, but he thought that it might be a plexiform neuroma, and hoped to excise a small portion of the tumour for microscopical examination.

A Child, aged 2 years, with Absent Abdominal Muscles, was shown by Mr. W. M. Mollison. The abdomen was very pendulous and the walls thin and lax, the abdominal walls being easily felt even when the child cried. The bowels kept regular and there was no difficulty in micturition. No electrical response could be obtained from the abdominal wall. There did not appear to be any distension of the bladder or thickening of the ureters.

Dr. Langmead said that there were about eighteen cases on record. Usually there was much distension of the bladder and thickening of its walls, with palpable ureters. He believed that most of the cases had died in early infancy; the present one was an exception in that respect.

A Child who had suffered from Acute Epiphysitis of the Lower End of the Femur at the age of 1 year and 7 months was shown by Mr. Lockhart Mummery. After operation the abscess cavity remained at the lower end of the diaphysis, which was scraped out, washed with strong formalin and filled with sterilised paraffin wax, the wound being stitched up again. The general health of the patient was good, but a small sinus remained from which a little clear fluid and occasionally some of the wax was discharged for about six months. It is now two years after the first operation and there is no appreciable deformity of the bone or shortening of the limb, and X-ray photographs show that the cavity in the bone has almost disappeared. The infection was a mixture of streptococci and staphylococci.

A Case of Talipes Calcaneus treated by splinting with a good result was shown by Mr. Lockhart Mummery.

A Case of Hirschprung's Disease, or chronic dilatation of the colon, was shown by Dr. O. Grünbaum. A child, aged 4 years, was admitted to hospital in August, 1908, for fits and constipation. The abdomen was enormously distended, the skin being tight and the superficial veins prominent. On administering an enema an enormous result was obtained, and on repeating this at intervals the child returned to a normal condition. He has been re-admitted twice since with a similar condition. Improvement followed rapidly each time upon the administration of enemas. The risk of colectomy was so great that Dr. Grünbaum, having consulted with his surgical colleague, considered that so long as the child can be kept in a healthy condition with suitable treatment no operation should be done.

Dr. G. A. Sutherland said that all the cases he had seen had died. As the prognosis was so bad, and the patient was now in such a favourable condition, it would be well to operate now.

Mr. Lockhart Mummery said Dr. Sutherland spoke lightly of operation, but what operation should be done? The mortality of colectomy in a number of cases in this condition which he had collected was 75 per cent.; that was because one could not bring the bowel up and make a spur of the abdominal wall. All that could be done was to form a fæcal fistula at the dilated portion of the bowel, and in most cases the bowel had torn away from the abdominal wall and the patient had died of peritonitis. The only operation likely to give permanent results was the excision of the dilated portion of the colon. This was a serious proceeding, but even if successful the colon might become re-dilated. He quoted four cases in which this had occurred. In a case which had gone on to adult life, a man, aged 23 years, he had done appendicostomy, the bowel being washed out daily. It was now six months since the operation, and the man had had no obstruction.

Provincial Societies.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

February Meeting, 1909.

The Medical Inspection of School Children.—Dr. Cheetham gave a paper on this subject in which he gave a *précis* of the 1907 Act and the circular letters 576, 582 and 596 of the Board of Education, pointing out that in the circular letter 576 the Board emphasises the fact that school inspection should not be divorced from public health. Regarding the much-debated question whether in county areas the school inspection should be performed by the district medical officers of health or full time officers he declared in favour of the former, adducing the following facts:

(1) They are men of experience accustomed to deal with children and their ailments; they are on the spot, and generally acquainted with the family history of the children. (2) The desirability, from the public health point of view, of getting them into the schools, as information would often be obtained of great value. (3) Prevention of overlapping of duties and possible friction. (4) Prompt attention to closure of schools and exclusion of affected children, as the notifications are sent direct to him. (5) Saving in travelling expenses.

He then dealt with the administration of the Act in the North Riding of Yorkshire, the area of which is 1,358,101 acres, population 254,829, with 398 public elementary schools, 79 situated in urban areas and 319 in rural areas; 16 of the schools have three departments and 29 two departments. There are 47,000 children on the registers and approximately 6000 children join the schools yearly. The original intention of the Education Committee was to appoint all the medical officers of health school officers,

but as one full time officer, representing about one fifth of the county, was unable to obtain the sanction of his authority, a full time lady officer was appointed at a salary of £250, first class contract ticket, and an allowance of twopence per mile for cycle. She commenced her duties on July the 1st. The medical officers of health in urban areas were paid at the rate of one shilling per child examined, and those in rural areas the same, with the addition of a travelling allowance of one pound per school per annum; they commenced their duties on April the 1st.

During 1908, 920 visits were paid to schools and departments, 8755 children examined, of whom 5958 were found to be suffering from some defect, equal to 68·06 per cent. The average time occupied in examination was 9·7 minutes; 110 children were referred for subsequent examination; 25·39 per cent. of the children had bad teeth. The attendance of the parents at the examination in some schools equalled 70 per cent. In the rural schools one of the first points requiring attention is the drying of the children's boots and clothes.

MIDLAND MEDICAL SOCIETY.

March the 10th, 1909.

A Case of Polyarthritis in a girl, aged 8 years, was shown by Dr. KAUFFMANN, who considered the disease to be identical with that described by Dr. Still.

Mr. LEEDHAM GREEN said that he considered the appearance of the child and the character of the temperature chart suggested that the condition in the joints was of tuberculous origin. This was supported by the fact that there was a small amount of effusion in each pleura, and also by the appearance of the abdomen, which was quite consistent with tuberculous peritonitis. He asked if the urine contained albumen and tubercle bacilli.

Dr. SAWYER thought the case very closely resembled the arthritis deformans in children which was described by Dr. G. F. Still. He said that if a radiograph showed the enlargement at the joints was due to a periarticular thickening it would be in favour of the view that the condition was not tuberculous. The absence of crepitation and pain on moving the joints was also against the tuberculous origin of the disease in this case.

Dr. SHORT spoke about the value of Calmette's reaction, and said that he did not consider that its absence on two occasions was of sufficient evidence to exclude tuberculosis. He did not think that Calmette's reaction was of much diagnostic value.

Mr. GILBERT BARLING favoured the view that the disease in the child was due to tuberculosis. He pointed out that there was a pathological dislocation of the right hip, and said that he considered this was much more likely to occur in a tuberculosis of the joint than in the chronic arthritis of Still. He thought that the arthritic fluid should be examined for tubercle bacilli and a biological examination made.

Dr. KAUFFMANN, in reply, said that he considered the disease to be identical with that described by Dr. Still, and that the disarticulation of the hip-joint was not against this view. He pointed out that a similar dislocation occurred in a Charcot's joint. He did not think that the appearance

of the child justified the diagnosis of tuberculosis. The urine contained a trace of albumin, but had not been examined for tubercle bacilli. He considered the disease in the joints was due to some microbic infection, but not to that of tubercle or syphilis. With regard to Calmette's reaction he said that all the materials used for the experiment were not of the same value.

Philadelphia Pediatric and Pathological Societies.

Joint Meeting of the Philadelphia Pediatric Society and the Pathological Society of Philadelphia, February the 25th, 1909.

JOSEPH MCFARLAND, M.D., *President.*

SYMPOSIUM ON CHILDHOOD PATHOLOGY.

Antenatal Pathology.—Dr. B. C. HIRST pointed out that the greatest waste of human life occurs in the nine months of intra-uterine existence, the death-rate being 25 to 30 per cent. greater than at any other period in life of similar length. A few of the problems of intra-uterine disease were considered—syphilis, deformities, and the influence of maternal emotions and impressions upon the fœtus. The duty of the physician to advise four years of treatment for the affected parent before attempting to beget children was emphasised, and the advisability of diagnosticating syphilis by a study of the fœtal body or of the clinical signs in the living infant was pointed out. Otherwise an indiscrete questioning of the parents would disclose a secret which might disrupt the family.

The influence of maternal emotions and impressions upon the fœtus was discussed. While the prevalent superstition that there might be a photographic reproduction of impressions upon the mother in physical defects of the fœtus should be combated and denied, it is necessary to admit that traumatism and profound emotions can arrest the physical development and affect the psychology of the fœtus, and can even terminate its existence.

Infections of the New-born.—Dr. S. MCC. HAMILL discussed the localised infections of the umbilical stump, and that large group of cases ordinarily described as infections of the new-born. He commented unfavourably upon the attempts to classify these infections on the basis of their symptomatology. He stated that true melæna neonatorum is almost invariably the result of some form of infection. He did not deny the possibility of certain other factors, syphilis especially, acting in a predisposing capacity. In the light of Lequex's investigations he thinks that the failure to find the infecting organism in these cases has been dependent upon incomplete bacterial investigation. He does not accept the recently expressed opinion that melæna neonatorum is a congenital malformation of the blood of unknown chemical nature. He can, however, conceive of the possibility of the toxins resulting from bacterial infection bringing about chemical alterations which might lead to free osmosis in the capillary vessels, resulting in widespread hæmorrhages. The lowered resistance of the prematurely born or weak infant, the desiccation and shedding of the umbilical stump and physiological processes, such as the early desquamation of the skin and mucosa,

together with the undeveloped condition of the lymphatic system, throw open the portals of entry and lead to ready infection when these infants are carelessly handled. He considers the most common portals of entry are the skin, the umbilical stump, and the gastro-intestinal tract. The pathological picture in these cases is congestion, hæmorrhage, and the usual changes resulting from infectious conditions.

The Pathologic Anatomy and Pathogenesis of Status Lymphaticus in Children.—Dr. John Howland, of New York, read this paper by invitation. He said that the consideration of thymus hypertrophy is rendered difficult by the lack of a normal standard. In the first two years of life this is variously given as anywhere between five and thirty grammes. Illness causes great atrophy of the gland, while in sudden death it is believed to be frequently enlarged, and therefore the only conclusive method of determination is from patients suffering violent death, and these in the first two years of life are too infrequent to establish a standard. Fifteen grammes probably represents approximately the average weight throughout the first two years of life, and yet it seems probable that glands weighing considerably more than this are not very unusual, and that the pathological complex known as status lymphaticus is very much more common than is usually supposed. Richter believes it to be, perhaps, the regular finding. The majority of authors do not subscribe to this view, and there is general unanimity in the acceptance of Paltauf's views in regard to status lymphaticus as a pathologic entity.

There has been much discussion in regard to the evidences of compression at autopsy. In a few instances this has undoubtedly been present, but most authors with extensive post-mortem experience believe it to be rare.

As to the cause of death opinions vary greatly. A few authors (the most recent of them being Warthin) believe tracheal compression to be responsible for death; the majority oppose this view, but as yet no satisfactory explanation has been afforded. Paltauf only laid stress upon the type of individual dying suddenly.

Strehla's experiments upon hyperthymisation of the blood lack confirmation. Recent experiments show that the glands, normal or pathologically enlarged, are no more toxic than other animal tissues. It has been suggested that the thymus hypertrophies to compensate for the lymphatic glands, which are frequently found to have degenerated. Recent studies of normal thymus glands by Stöhr and Hammer indicate that the thymus is not composed of lymphoid tissue. If this is so such an hypothesis seems altogether improbable. At the end of twenty years after Paltauf's original paper a satisfactory explanation of the cause of death is entirely lacking.

Tumour Growth in Childhood.—Dr. David Reisman said that it is impossible to give figures that will express the frequency of tumours in childhood as compared with their frequency in adult life. All tumours are represented in children. The connective-tissue tumours, fibromas and lipomas are rare. Chondromas occur much oftener in combination with other tumours than as pure cartilaginous growths. Angioma (hæmangioma) is frequent and is practically always congenital. It is most frequent on the skin but is also found in the viscera and even in the nervous system. Chylangioma is rare. Osteomas are occasionally found in children, but it is difficult to distinguish at times between a genuine osteoma and an exostosis. Neuromas are comparatively frequent in childhood, their favourite seat being the eye, especially the eyelid. Myoma is a rare tumour

in children. Rhabdomyoma is met in the kidney and occasionally in the heart. Liomyoma is exceedingly rare.

Sarcoma is probably the commonest tumour of childhood. It may be of any of the histologic varieties, though the round-cell and lympho-sarcoma are most frequent. Giant-cell and melanotic sarcoma are rare. The bones seem to be the place of election, though it is frequent in the brain. In the internal organs sarcoma is rare in children, but when it occurs it is frequently congenital. Under the head of "sarcoma" Dr. Reisman considered chloroma, which occurs chiefly in the temporal and parietal regions of the skull and in the hard palate, sternum and ribs. It may be really a form of leukæmia and not a tumour in the strict sense. Glioma is common in childhood, and in the brain is nearly as frequent as sarcoma.

The most common of the benign epithelial tumours is the papilloma, especially common in the larynx. Carcinoma is rare. After deducting doubtful cases there remain only a few cases the cancerous nature of which cannot be questioned, occurring in the stomach and intestines. Hypernephroma is a peculiar tumour in the kidney generally derived from misplaced adrenal tissue. It is fairly common in childhood and has a tendency to give metastasis to the bones. The so-called mixed tumours are most commonly found in the kidney, producing enormous growths. Cysts also occur in children—parasitic, retention, proliferative and dermoid cysts. Finally, true teratomas, being congenital, are naturally most frequent in early life.

Neuropathology in Childhood.—Dr. D. J. McCarthy read a paper on neuropathology in childhood, with a consideration of pathological factors in some cases of retarded mental development. He said that neuropathology in childhood does not differ essentially from that in adult life. We may find the same pathological processes, but the results of these processes, so far as disturbance of function is concerned, are somewhat different, due in part to the incomplete development of the infantile nervous system. Pathological processes which cause relatively minor disturbances in adults may cause serious disturbance or even perversion of function when they occur in infancy.

Retarded mental development has been studied clinically, embryologically, and pathologically. Clinically the results are insufficient and unsatisfactory. Heredity, prolonged labour and instrumental delivery are of importance. Dr. McCarthy then discussed the pathological conditions found before birth and afterwards upon which retarded development seemed to depend. The correlation between permanent as well as temporary visceral disturbances and minor mental and nervous conditions should be remembered.

Correspondence.

MEDICAL INSPECTION OF ELEMENTARY SCHOOL CHILDREN.

To the Editor of The British Journal of Children's Diseases.

Sir,—In *re* the meeting at the Royal Society of Medicine, at which Dr. Carpenter delivered his carefully thought-out address on the subject of the medical inspection of elementary school children. Dr. Carpenter was right, and his critics were wrong; he advocated idealism, they advocated

humbug. The gentlemen who held a brief for the Government proved that it was "a few minutes'" inspection and not an examination, and to my mind absolutely useless, and as ratepayers we ought to object to our money being literally thrown away. I see that the nation paid £238,796 for inspection in 1907–8. Another critic put his infantile opinion against Dr. George Carpenter's twenty-three years' experience. On his own showing, he said, all our eyes were wrong, therefore all our other organs were wrong, but it did not matter.

It would be better for the nation to pay, say, 10*s.* 6*d.* for one good examination than for three inspections of "a few minutes" each. Take the class of domestic servants in this country and sea-side district. After ten months' observation I find a class of weaklings—small, undeveloped, bad teeth, indigestion, anæmia, ear disease (deafness), adenoids, enlarged tonsils, hypertrophic rhinitis—or they are degenerates and become pregnant or thieve. It takes me always thirty to forty minutes to see a patient, and yet I make many mistakes. What must a man with a lightning diagnosis of a "few minutes" make? Hamlet says:

> "Diseases, desperate grown
> By desperate appliance are relieved
> Or not at all."

I hope Dr. Carpenter will be supported by The Society for the Study of Disease in Children. Herbert wrote:

> "Dare to be true, nothing can need a lie;
> A fault which needs it most grows two thereby."

I am, Sir, yours truly,

W. Milner Burgess.

"Ellerslie," Fourth Avenue,
Frinton-on-Sea.

To the Editor of The British Journal of Children's Diseases.

Sir,—In reference to the discussion of the above subject at the meeting of the Royal Society of Medicine on February the 26th last, at which I was present, some of the speakers who followed the opening speech so much confused the issues that I hope you will allow me to make some remarks now that I have been able to study the documents presented to the meeting —a task that was impossible at the time owing to their complexity.

The facts appear to be that the Board of Education issued a circular and schedule dated January 23rd, 1908, showing the minimum of information required to be ascertained by the inspector, which amounts to a very full account of each child's body in reference to development and disease, and after giving the minimum required by the Board it further leaves considerable latitude to the inspector. This part of the circular must necessarily have been drawn by a medical man, and he has done his work well.

It would appear, however, that others had a hand in framing this circular who insisted on the insertion of their conflicting ideas, and thereby made the document absurdly contradictory in its directions and commands.

Thus after demanding a full account of the state of the child, which necessitates a very searching examination and inquiry—(the details of which the eminent physician who opened the discussion had enumerated by means of a printed form)—the Board goes on to say *inter alia* that the examination should only take a few minutes, and that the child should only have its clothes loosened or only be partially undressed.

Now, it is evident that "Too many cooks spoil the broth," and that this circular is ridiculous owing to these conflicting orders, and the consequent impossibility of carrying out its directions.

It appears to me that this *impasse* was what Dr. Carpenter wished to emphasise in his speech, but some of the subsequent speakers appeared to think that he was endeavouring on his own account to force on the community an immediate thorough examination of all school children, and one speaker went so far as to say that Dr. Carpenter wished for examination while the Board only required inspection, which latter is negatived by the nature of the Board's schedule, and another to speak of Dr. Carpenter's schedule of examination, which is obviously necessary to carry out the Board's requirements, as a result of his "misdirected ingenuity."

Now what I want to emphasise is that the points which require arrangement and elucidation when extricated from the confusion are:

(1) The emendation of the Board's circular to make it a practical direction to its officers.

(2) The amount of examination possible under present circumstances.

(3) The amount of examination and information which should be aimed at in future when the fears and prejudices of parents are overcome.

I am, Sir, yours truly,

SHEFFIELD NEAVE.

Mill Green Park,
Ingatestone, Essex.

To the Editor of THE BRITISH JOURNAL OF CHILDREN'S DISEASES.

SIR,—The time is certainly ripe for an expression of opinion from the medical profession in this matter of inspection of children, and it can take no better form than a discussion by so representative a body as the Section for the Study of Disease in Children of the Royal Society of Medicine. The pity is that no such discussion was invited before the order was issued. In the case of any other profession no body of laymen, such as the Board of Education, would have presumed to promulgate a scheme to carry out highly technical work in a very large scale without at least making an attempt to obtain guidance as to the best method from representatives of those who would be called upon to do the work. It must not be forgotten that the desire for an organised, routine medical examination of children originated with us, and is an old idea amongst those who have had much to do with the care of children; and apart from the advisability of getting the ideas of specialists on such a subject, one might call the attention of the powers that be to the fact that fairness and courtesy still exist, though perhaps they are becoming scarcely discernible in the treatment of our profession by those who see their way to making any use of us.

As it is, it would seem to be a stormy voyage upon which has started this child of the Board of Education. As a profession we must decline to acknowledge any responsibility for it—this scheme, conceived in ignorance and prematurely thrust forth into the world, apparently on the advice of those who have little practical experience of the care of children of any kind. Unwieldy as the "experiment" and inadequate as "the masterly production," which its few friends alternately claim it to be, according to the set of the tide of criticism, this poor child is at present tossed in its frail bark of red tape between the Scylla of increasing rates and the Charybdis of scientific requirements.

In my dual capacity of general practitioner and member of an education committee which has to provide for 4000 children I have been much interested in this matter, and have watched as far as possible the discussions that have taken place as reported in the press. Everywhere it is clear that economy is the first consideration, not efficiency. And that is the fault of the scheme, not of the committees to whose ill-fortune it has fallen to carry it out. It is absurd to expect the requirements of the Board "above" to be thoroughly carried out with the means at the disposal of local education committees. Here and there enthusiastic workers will carry out the inspection on a scientific basis, and, as Dr. George Carpenter has shown, very soon get into trouble and be thrown over by the Central Board.

Statistics based on data furnished by the present system of inspection cannot have any scientific value, for there is no possibility of uniformity. They are collected by three quite different classes of workers: The specialist at school inspecting, who does nothing else; the part time medical officer of health, who is also a general practitioner; and the whole time medical officer of health, who has usually long given up medicine, if, indeed, he ever practised it more than sufficient to get qualified.

Beyond statistics it does not seem clear exactly what benefits are likely to accrue to the rising generation. There is certainly considerable acceleration in the pace at which cleanliness is overtaking or overwhelming a certain class, but with no inspection in immediate prospect will the individual cases of uncleanliness improve at any greater pace than has been evident for some years past with modern education and sanitation? It seems of small value to hunt for defects which one has no power of remedying. The law which tells a man that he is a better judge than experts as to whether his child should be vaccinated is not in a position to turn round and say that the same child has such and such a defect, and he must do so and so and likewise expend much money to remedy that defect. He may say, "I do not agree that there is anything wrong with the child," or "Quite so, it is necessary; I have no money to expend on such objects. If the State thinks it ought to be done let the State do it and pay for it." There is certainly the clumsy legal machinery of the Cruelty to Children Act, but who is going to be the first to put that in motion? And where is the line to be drawn? The manner in which the Board of Education frankly urges on local authorities to make every use (and abuse) of existing medical charities is nothing less than brazen impudence. In the same spirit the chairman of my committee remarked, in reply to my protest against the pitiful sum which was suggested as sufficient salary for the inspector in this district, "Oh come, Doctor, we never have to appeal in vain to the generosity and patriotism of your profession!"

If this scheme is not completely modified it must end in the municipalisation of medicine, and it is absolutely necessary that those holding hospital appointments should loyally join forces with the general practitioners in firmly withstanding the encroachments of an official department whose wish, perhaps, is natural to get as much as possible for nothing.

I must apologise for the length of this communication, but the subject is so large that it is very difficult to know where to draw the line. There are many points I should like to have called attention to, but fear I have already worn out your patience.

I am, Sir, yours truly,

T. Davys Manning, M.B.

Rodwell Lodge, Weymouth.